

# XPedite7331

Intel® Core™i7 Processor-Based 3U Air-Cooled CompactPCI Express Module

- › Intel® Core™i7-610E, -620LE, and -620UE processors
- › Dual-core with hyper-threading technology
- › 3U CompactPCI Express module
- › Air cooling
- › Up to 8 GB of DDR3-1066 ECC SDRAM in two channels
- › 32 MB NOR boot flash
- › Up to 16 GB of NAND flash
- › Usable as system controller or peripheral
- › One 10/100/1000BASE-T Ethernet port
- › One USB UART serial port
- › Linux BSP
- › Wind River VxWorks BSP
- › QNX Neutrino BSP
- › Green Hills INTEGRITY BSP
- › Microsoft Windows



## XPedite7331

The XPedite7331 is a 3U air-cooled CompactPCI Express (cPCIe) single-board computer based on the Intel® Core™i7 processor and Intel QM57 chipset. With dual cores operating at 2.53, 2.0, or 1.06 GHz, the Intel® Core™i7 delivers enhanced performance and efficiency for today's network information processing and other embedded computing applications.

Complementing processor performance, the XPedite7331 features up to 8 GB of DDR3-1066 ECC SDRAM, multiple PCI Express interfaces, 32 MB of NOR boot flash, and up to 16 GB of NAND flash. A Gigabit Ethernet port and a USB UART serial port provide for additional system flexibility.

The XPedite7331 provides a high-performance, feature-rich solution for current and future generations of embedded applications. Operating system support packages for the XPedite7331 include Wind River VxWorks, QNX Neutrino, Green Hills INTEGRITY, and Linux.



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### Extreme Engineering Solutions

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**Processor**

- Intel® Core™i7 processor operating at 2.53, 2.0, or 1.06 GHz
- Dual-core with hyper-threading technology
- Intel QM57 chipset
- Dual channel integrated memory controller
- Integrated graphics controller
- 4 MB of shared cache

**Memory**

- Up to 8 GB of DDR3-1066 ECC SDRAM on two channels
- 32 MB NOR boot flash
- Up to 16 GB of NAND flash

**XJ3 Interface**

- x4 PCIe interface
- x1 PCIe interface

**XJ2 Interface**

- One SATA port
- JTAG interface

**Front Panel I/O**

- Ethernet, USB UART serial, DVI, USB, and x1 PCIe ports

**Software Support**

- Linux BSP
- Wind River VxWorks BSP
- QNX Neutrino BSP
- Green Hills INTEGRITY BSP
- Microsoft Windows

**Physical Characteristics**

- 3U air-cooled CompactPCI Express form factor
- Dimensions: 100 mm x 160 mm

**Environmental Requirements**

Contact factory for appropriate board configuration based on environmental requirements.

- Supported ruggedization levels (see chart below): 1, 3
- Conformal coating available as an ordering option

**Power Requirements (Estimate)**

- 50 W (2.53 GHz)

Supported Ruggedization Level	Level 1	Level 3
Cooling Method	Standard Air-Cooled	Rugged Air-Cooled
Operating Temperature	0 to +55 °C ambient (300 LFM)	-40 to +70 °C (600 LFM)
Storage Temperature	0 to +85 °C ambient	-40 to +105 °C ambient
Vibration	0.002 g <sup>2</sup> /Hz, 5 to 2000 Hz	0.04 g <sup>2</sup> /Hz (maximum), 5 to 2000 Hz
Shock	20 g, 11 ms sawtooth	30 g, 11 ms sawtooth
Humidity	0% to 95% non-condensing	0% to 95% non-condensing

